|  |
| --- |
| **Lesson Title:** NO! NOT WORD PROBLEMS! Working with Expressions |
| **Subject area / course / grade level:**  **Algebra / Math / Grades 4 -6** |
| **Introduction:**  This lesson is designed to focus on writing /solving expressions. It is to be taught after the students have been introduced to order of operations. |
| **Lesson Length:**  **60 minutes** |
| **Materials:**  Math Journals  Newspaper ads  Computer/ELMO  Calculators  Paper,Pencil, scissors, and glue |
| **Lesson Overview:**  Students will begin the lesson with the “Job Wanted” activity. They will follow that up with a “Going Shopping” activity to continue to build on the concept of expressions. |
| **Tennessee Standards:**  **4th**  GLE 0406.1.2 Apply and adapt a variety of appropriate strategies to problem solving, including estimation, and reasonableness of the solution.  GLE 0406.1.7 Recognize the historical development of mathematics, mathematics in context, and the connections between mathematics and the real world.  GLE 0406.2.6 Solve problems involving whole numbers, fractions, and/or decimals using all four arithmetic operations.  **5th**  GLE 0506.2.5 Develop fluency in solving multi-step problems using whole numbers, fractions, mixed numbers, and decimals.  GLE 0506.1.2 Apply and adapt a variety of appropriate strategies to problem solving, including estimation, and reasonableness of the solution.  **6th**  GLE 0606.1.7 Recognize the historical development of mathematics, mathematics in context, and the connections between mathematics and the real world.  GLE 0606.2.2 Solve multi-step mathematical, contextual and verbal problems using fractions, mixed numbers, and decimals. |
| **Lesson objective/outcome(s):**  **TLW: Solve expressions using whole numbers, decimals, and fractions.** |
| **ENGAGE**  The class will be given an index card and asked to write a job they wish to have in the future. They will then write their hourly wage amount of $9.00 on the card (5th and 6th may want to make this amount with a decimal). The teacher will then give them a word problem for them to solve using their cards.  **It is Monday and your boss asks you to work 7 hours today. At the end of the day she gives you your earnings. On your way home you decide to take part of your earnings to buy a Big Mac Meal for you and one for your friend. Each meal costs $6. How much money do you have when you get home?**  \*\*\* Use decimals if they have already been introduced in class. (example $12.75 for the hourly wage)  Students will then work their problems out on the back of the index card. |
| **EXPLORATION**  Have the class come up with an equation for solving the Job Wanted activity. ( It should look something like this (7 x 9) – (2 x 6) = N N = $51) Then give each student a section of a sales ad. Have them cut out up to 5 items they may need to buy. Put the students into groups of 3 or 4. Have the students create 2 word problems using their sales ad on the worksheet given to them. If the students are finished and still waiting on the other groups to finish, have them continue to create extra word problems. Once all the groups are finished, go over their problems/equations/answers with the class. |
| **EXPLANATION**   * **Show the students the powerpoint on solving word problems. They will need their white boards to solve the problems that are in the powerpoint.** |
| **ELABORATION**   * The students will then play a round or two of games found at the end of the powerpoint. * <http://www.mathplayground.com/wordproblems.html> |
| **EVALUATION**  Teacher/student observations and on-going discussion  Each student will create 2 word problems with the matching equation and answer on index cards.  <http://www.thatquiz.org/tq/previewtest?C/M/E/W/67941206680805> - This is also a great worksheet to print and give to the students on word problem clue words. |
|  |

|  |  |
| --- | --- |
|  |  |